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(12) **United States Patent**
Borschel et al.(10) **Patent No.: US 6,365,218 B1**
(45) **Date of Patent: Apr. 2, 2002**(54) **PEDIATRIC FORMULA AND METHODS FOR PROVIDING NUTRITION AND IMPROVING TOLERANCE**(75) Inventors: **Marlene W. Borschel**, Worthington;
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(US)(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.(21) Appl. No.: **09/498,350**(22) Filed: **Feb. 4, 2000**(51) **Int. Cl.**⁷ **A23L 1/054**; A23L 1/29(52) **U.S. Cl.** **426/573**; 426/72; 426/74;
426/801(58) **Field of Search** 426/72, 74, 573,
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The present invention provides an improved pediatric formula and methods for providing nutrition to and enhancing tolerance in pediatric patients. The formula may be provided in powder, concentrate or ready-to-feed forms. The pediatric formula comprises, based on a 100 kcal basis, about 8 to about 16 grams carbohydrate (preferably about 9.4 to about 12.3 grams), about 3 to about 6 grams lipid (preferably about 4.7 to about 5.6 grams), about 1.8 to about 3.3 grams protein (preferably about 2.4 to about 3.3 grams), and a tolerance improver comprising about 37 to about 370 milligrams (preferably about 74 to about 222 milligrams, more preferably about 111 to about 148 milligrams) xanthan gum. The formula may also be provided in a powder, which comprises, based on 100 grams of powder, about 30 to about 90 grams carbohydrate (preferably about 48 to about 59), about 15 to about 30 grams lipid (preferably 22 to about 28 grams), about 8 to about 17 grams protein (preferably about 11 to about 17), and about 188 to about 1880 milligrams (preferably about 375 to about 1125, more preferably about 375 to about 1125 milligrams) xanthan gum. The formula preferably further comprises vitamins and minerals and may further comprise a stabilizer. The methods comprise administering to a pediatric patient an effective amount of a pediatric formula according to the invention, as described above.

78 Claims, No Drawings